

MANUFACTURE OF SEMICONDUCTOR DEVICE

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Abstract of JP2000114172

PROBLEM TO BE SOLVED: To realize a high-performance semiconductor device by providing a semiconductor film, having crystal properties that can practically be regarded as the single-crystal and assembling the circuit with a TFT, wherein the semiconductor film such as this is the active layer.

SOLUTION: In this manufacture, following steps are provided in a first step, heat annealing is performed for the semiconductor film including germanium; in a next step, laser annealing is performed for the oxidized semiconductor film; in the next step, furnace annealing is performed for the semiconductor film after the laser annealing; and in the last step, oxidizing is performed for the semiconductor film including the crystal. The laser annealing is performed at energy density of 250-5,000 mJ/cm².

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